

AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as shown below.

This listing of claims replaces all previous versions and listings of claims in the present application.

Listing of Claims

1. – 24. (Cancelled)

25. (Currently Amended) A method for composing a data compartment aggregation packet frame, comprising:

generating a first data compartment, by a processor, including a compartment identifier provided with a compartment recipient address representing an address of a first station, a first service data, and a frame check sequence compartment;

generating a second data compartment, by the processor, including a compartment identifier provided with a compartment recipient address representing an address of a second station, a second service data, and a frame check sequence compartment;

combining the first and second data compartments, by a combiner, to define a data carriage;

generating a carriage header, by a carriage header generator, that is located in front of the data carriage to define a carriage;

generating a MAC header, by a MAC header generator, that is located in front of the carriage, the MAC header including a portion allocated with a unique bit pattern and a portion

that stores a non-unicast recipient address associated with the first station and the second station;
and

generating a frame check sequence, by a frame check sequence generator, for error detection in the MAC header and the carriage.

26. (Currently Amended) A composing apparatus that composes a data compartment aggregation packet frame, comprising:

a MAC layer processor;

a ~~first~~ generator, operable to generate a first data compartment having a compartment identifier provided with a compartment recipient address representing an address of a first station, a first service data, and a frame check sequence compartment, and [[:]]

~~a second generator,~~ operable to generate a second data compartment having a compartment identifier provided with a compartment recipient address representing an address of a second station, a second service data, and a frame check sequence compartment;

a combiner, operable to combine the first and second data compartments to define a data carriage;

a carriage header generator, operable to generate a carriage header that is located in front of the data carriage to define a carriage;

a MAC header generator, operable to generate a MAC header that is located in front of the carriage, the MAC header including a portion allocated with a unique bit pattern and a portion that stores a non-unicast recipient address associated with the first station and the second station; and

a frequency check sequence generator, operable to generate a frame check sequence for error detection in the MAC header and the carriage.

27. (Currently Amended) A method for decomposing, in a decomposing apparatus at a station, a data compartment aggregation packet frame having a MAC header, a carriage header and a plurality of data compartments, the decomposing method comprising:

detecting a non-unicast recipient address, by a detector, which is associated with a plurality of stations, including ~~[[a]]~~ the station with the decomposing apparatus and a unique bit pattern located in a MAC header;

separating the plurality of data compartments, by a separator;

comparing, by a comparator, each compartment recipient address representing an address of a station to the address of the station with the decomposing apparatus;

storing the separated plurality of data compartments in a buffer; and

processing all of the separated data compartments, by a processor, including a data compartment with a compartment identifier provided with ~~[[a]]~~ the compartment recipient address that match the ~~, which represents an~~ address of the station with the decomposing apparatus, and dropping the separated data compartments having a compartment recipient address that do not match the address of the station with the decomposing apparatus.

28. (Currently Amended) A decomposing apparatus at a station that decomposes a data compartment aggregation packet frame having a MAC header, a carriage header and a plurality of data compartments, comprising:

a detector, operable to detect a non-unicast recipient address which is associated with a plurality of stations including ~~[[a]]~~ the station with ~~said~~ the decomposing apparatus and a unique bit pattern located in a MAC header;

a separator, operable to separate the plurality of data compartments;

a comparator, operable to compare each compartment recipient address representing an address of a station to the address of the station with the decomposing apparatus;

a buffer, operable to store the separated data compartments; and

a processor, operable to process all of the separated data compartments, including a data compartment with a compartment identifier provided with ~~[[a]]~~ the compartment recipient address that match ~~, which represents~~ the address of the station with said decomposing apparatus, and dropping the separated data compartments having a compartment recipient address that do not match the address of the station with the decomposing apparatus.

29. (Currently Amended) A non-transitory computer readable medium encoded with a computer readable data compartment aggregation packet frame, comprising:

a first data compartment, including a compartment identifier provided with a compartment recipient address representing an address of a first station, a first service data, and a frame check sequence compartment;

a second data compartment, including a compartment identifier provided with a compartment recipient address representing an address of a second station, a second service data, and a frame check sequence compartment, the first and second data compartments being aligned to define a data carriage;

a carriage header, located in front of the data carriage to define a carriage;

a MAC header, located in front of the carriage, the MAC header including a portion allocated with a unique bit pattern and a portion for storing a non-unicast recipient address associated with the first station and the second station; and

a frame check sequence for error detection in the MAC header and the carriage.